

**Listing of the Claims:**

1. (Original) A package for substances or mixtures of substances, characterized in that the package contains an optically sensitive element.
2. (Original) The package according to claim 1, characterized in that a sensitive membrane or layer is present on the sensitive element or is the sensitive element.
3. (Currently Amended) The package according to claim ~~1 or~~ 2, characterized in that the membrane or layer is subject to specific layer thickness changes, scattered light changes, changes of optical refractive index, spectral changes.
4. (Currently Amended) The package according to ~~any of the previous claims~~ claim 3, characterized in that the layer thickness changes can be measured by the method of interferometry, surface plasmon resonance, spectroscopy.
5. (Currently Amended) The package according to ~~any of the previous claims~~ claim 3, characterized in that the layer thickness change is effected dependently on ~~concentration, i.e. the one of~~ oxygen concentration, hydrocarbon concentration, hydrogen concentration, H<sub>2</sub>O content, ~~or~~ and dependently on temperature or pressure.
6. (Currently Amended) The package according to ~~any of the previous claims~~ claim 2, characterized in that the membrane or layer contains one or more dyes or selective markers.
7. (Currently Amended) The package according to ~~any of the previous claims~~ claim 2, characterized in that state changes within the package are detectable by surface plasmon resonance, spectroscopy or luminescence changes on the membrane or layer.
8. (Currently Amended) The package according to ~~any of the previous claims~~ claim 1, characterized in that a marker or dye is changeable dependently on concentration (pH, O<sub>2</sub>) or

dependently on temperature or pressure.

9. (Currently Amended) The package according to ~~any of the previous claims~~ claim 1, characterized in that a detection is effected through the package without damaging the same.

10. (Currently Amended) The package according to ~~any of the previous claims~~ claim 2, characterized in that the membrane or layer is applied directly to the inner side of the package.

11. (Currently Amended) The package according to ~~any of the previous claims~~ claim 2, characterized in that the membrane or layer is fixed to an adhesive film adapted to be bonded into the package.

12. (Currently Amended) The package according to ~~any of the previous claims~~ claim 2, characterized in that the membrane or layer is connected to the package ~~on/in~~ on or in a transparent element which is also fixable in a frame.

13. (Currently Amended) The package according to ~~any of the previous claims~~ claim 1, characterized in that the sensitive element is inserted into the package.

14. (Currently Amended) The package according to ~~any of the previous claims~~ claim 2, characterized in that calibration of the sensitive layer or membrane can be effected upon closing by at least one of vacuum or excess pressure, supply of gas, supply of calibrating liquid ~~and/or~~ and temperature variation.

15. (Currently Amended) The package according to ~~any of the previous claims~~ claim 2, characterized in that a calibration of the sensitive layer or membrane can be effected by an external calibration before incorporation into the package.

16. (Currently Amended) The package according to ~~any of the previous claims~~ claim 15, characterized in that an external calibrating module is adapted to be calibrated by pressure changes.

17. (Currently Amended) The package according to ~~any of the previous claims~~ claim 2, characterized in that a sensitive membrane or layer has at least one of an optical, mechanical ~~and/or~~ and chemical protective ~~layer(s)~~ layer applied thereto.

18. (Currently Amended) The package according to ~~any of the previous claims~~ claim 17, characterized in that the protective ~~layer(s)~~ layers are formed of by one of permeable metal, dielectric, PTFE or PTFE-base layers.

19. (Currently Amended) The package according to ~~any of the previous claims~~ claim 17, characterized in that the protective ~~layer(s)~~ layers are formed of at least one of reflective ~~and/or~~ and absorbent layers, in particular based on at least one of synthetic resins ~~and/or~~ and acrylic.

20. (Currently Amended) The package according to ~~any of the previous claims~~ claim 1, characterized in that the package is transparent to electromagnetic waves or has a window transparent to electromagnetic waves.

21. (Currently Amended) The package according to ~~any of the previous claims~~ claim 2, characterized in that a ~~membrane/layer~~ membrane or layer indicates a fault or leak by color change without additional measuring technology.

22. (Currently Amended) The package according to ~~any of the previous claims~~ claim 1, characterized in that the sensitive element can detect multiparameters.

23. (Original) The package according to claim 22, characterized in that the multiparameters are dependent on concentration, pressure, moisture or temperature.

24. (Currently Amended) The package according to ~~any of the previous claims~~ claim 2, characterized in that a sensitive membrane or layer has at least one piece of information applied thereto.

25. (Currently Amended) The package according to ~~any of the previous claims~~ claim 2, characterized in that a sensitive membrane or layer has a least one radio frequency identification (RFI) chip applied ~~thereto/thereon~~ thereto or thereon.

26. (Original) The package according to claim 25, characterized in that information is stored and retrievable by electromagnetic waves in the RFI.

27. (Currently Amended) The package according to ~~either of claims 24/25~~ claim 24, characterized in that the information comprises calibrating data, batch information and identifications.

28. (Currently Amended) The package according to ~~any of the previous claims~~ claim 2, characterized in that the ~~membrane/layer~~ membrane or layer has a signal evaluation unit present thereon.

29 (Currently Amended) The package according to claim 28, characterized in that measuring data, control messages are transferable by means of electromagnetic waves ~~and/or~~ and ~~the~~ an energy supply is thus effected.